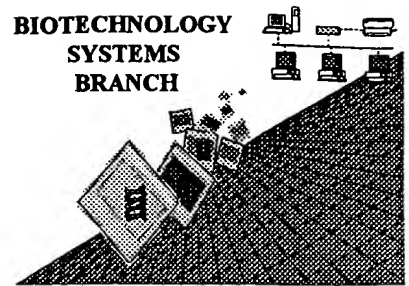


5.401e

# RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/105,117E  
Art Unit / Team No. : 1652  
Date Processed by STIC: 9/28/99

**THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.**

**PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**
- 2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

**THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.**

**IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:**

**MARK SPENCER 703-308-4212**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/105,117E

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1        Wrapped Nucleics      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2        Wrapped Aminos      The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3        Incorrect Line Length      The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4        Misaligned Amino Acid      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs  
Numbering      between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5        Non-ASCII      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6        Variable Length      Sequence(s)        contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and  
indicate in the (ix) feature section that some may be missing.
- 7        PatentIn ver. 2.0 "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid  
sequence(s)       . Normally, PatentIn would automatically generate this section from the  
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section  
to the subsequent amino acid sequence.
- 8        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence:  
(OLD RULES)      (2) INFORMATION FOR SEQ ID NO:X:  
                         (1) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
                         (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
                         This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence.  
(NEW RULES)      <210> sequence id number  
                         <400> sequence id number  
                         000
- 10        Use of n's or Xaa's      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11        Use of <213>Organism      Sequence(s)        are missing this mandatory field or its response.  
(NEW RULES)
- 12        Use of <220>Feature      Sequence(s)        are missing the <220>Feature and associated headings.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13        PatentIn ver. 2.0 "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted  
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999  
TIME: 14:26:31

Input Set: I105117E.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

Does Not Comply  
Corrected Diskette Needed

1 <110> APPLICANT: Vrjic, Marina  
2 Eggeling, Lothar  
3 Sahm, Hermann  
4 <120> TITLE OF INVENTION: PROCESS FOR THE MICROBIAL PRODUCTION OF AMINO ACIDS BY  
5 BOOSTED ACTIVITY OF EXPORT CARRIERS  
6 <130> FILE REFERENCE: Fj 122 sequence listing  
7 <140> CURRENT APPLICATION NUMBER: US/09/105,117E  
8 <141> CURRENT FILING DATE: 1998-06-17  
9 <150> EARLIER APPLICATION NUMBER: PCT/DE96/02485  
10 <151> EARLIER FILING DATE: 1996-12-18  
11 <150> EARLIER APPLICATION NUMBER: 195 48 222.0  
12 <151> EARLIER FILING DATE: 1995-12-22  
13 <160> NUMBER OF SEQ ID NOS: 3  
14 <170> SOFTWARE: PatentIn Ver. 2.1  
15 <210> SEQ ID NO 1  
16 <211> LENGTH: 307  
17 <212> TYPE: PRT  
18 <213> ORGANISM: Corynebacterium glutamicum  
19 <400> SEQUENCE: 1  
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21 1 5 10 15  
22 Ser Phe Glu Gly Ala Ser Leu Ala Leu Ser Ile Ser Pro Ser Ala Val  
23 20 25 30  
24 Ser Gln Arg Val Lys Ala Leu Glu His His Val Gly Arg Val Leu Val  
25 35 40 45  
26 Ser Arg His Glu Leu Ile Xaa Thr Arg Asn His Glu Leu Ile Xaa Met  
27 50 55 60  
28 Thr Ile Val Thr Gln Pro Ala Lys Ala Thr Glu Ala Gly Glu Val Leu  
29 65 70 75 80  
30 Val Gln Ala Ala Arg Lys Met Val Leu Leu Gln Ala Glu Thr Lys Ala  
31 85 90 95  
32 Gln Leu Ser Gly Arg Leu Ala Glu Ile Pro Leu Thr Ile Ala Ile Asn  
33 100 105 110  
34 Ala Asp Ser Leu Ser Thr Trp Phe Pro Pro Val Phe Asn Glu Val Ala  
35 115 120 125  
36 Ser Trp Gly Gly Ala Thr Leu Thr Leu Arg Leu Glu Asp Glu Ala His  
37 130 135 140  
38 Thr Leu Ser Leu Leu Arg Arg Gly Asp Val Leu Gly Ala Val Thr Arg  
39 145 150 155 160  
40 Glu Ala Asn Pro Val Ala Gly Cys Glu Val Val Glu Leu Gly Thr Met  
41 165 170 175  
42 Arg His Leu Ala Ile Ala Thr Pro Ser Leu Arg Asp Ala Tyr Met Val  
43 180 185 190  
44 Asp Gly Lys Leu Asp Trp Ala Ala Met Pro Val Leu Arg Phe Gly Pro

W--&gt;

see  
item 10  
in Enol  
summary  
sheet

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999  
TIME: 14:26:31

Input Set: I105117E.RAW

```

45          195          200          205
46      Lys Asp Val Leu Gln Asp Arg Asp Leu Asp Gly Arg Val Asp Gly Pro
47          210          215          220
48      Val Gly Arg Arg Arg Val Ser Ile Val Pro Ser Ala Glu Gly Phe Gly
49      225          230          235          240
50      Glu Ala Ile Arg Arg Gly Leu Gly Trp Gly Leu Leu Pro Glu Thr Gln
51          245          250          255
52      Ala Ala Pro Met Leu Lys Ala Gly Glu Val Ile Leu Leu Asp Glu Ile
53          260          265          270
54      Pro Ile Asp Thr Pro Met Tyr Trp Gln Arg Trp Arg Leu Glu Ser Arg
55          275          280          285
56      Ser Leu Ala Arg Leu Thr Asp Ala Val Val Asp Ala Ala Ile Glu Gly
57          290          295          300
58      Leu Arg Pro
59      305
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61      <211> LENGTH: 254
62      <212> TYPE: PRT
63      <213> ORGANISM: Corynebacterium glutamicum
64      <400> SEQUENCE: 2
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67      Leu Leu Leu Ser Ile Gly Pro Gln Asn Val Leu Val Ile Lys Gln Gly
68          20          25          30
69      Ile Lys Arg Glu Gly Leu Ile Ala Val Leu Leu Val Cys Leu Ile Ser
70          35          40          45
71      Asp Val Thr Met His Thr Met His Phe Leu Phe Ile Ala Gly Thr Leu
72          50          55          60
73      Gly Val Asp Leu Leu Ser Asn Ala Ala Pro Ile Val Leu Asp Ile Met
74          65          70          75          80
75      Arg Trp Gly Gly Ile Ala Tyr Leu Leu Trp Phe Ala Val Met Ala Ala
76          85          90          95
77      Lys Asp Ala Met Thr Asn Lys Val Glu Ala Thr Met His Pro Gln Ile
78          100          105          110
79      Ile Glu Glu Thr Glu Pro Thr Val Pro Asp Asp Thr Pro Leu Gly Gly
80          115          120          125
81      Ser Ala Val Ala Thr Asp Thr Arg Asn Arg Val Arg Val Glu Val Ser
82          130          135          140
83      Val Asp Lys Gln Arg Val Trp Val Lys Pro Met Leu Met Ala Ile Val
84          145          150          155          160
85      Leu Thr Trp Leu Asn Pro Asn Ala Tyr Leu Asp Ala Phe Val Phe Ile
86          165          170          175
87      Gly Gly Val Gly Ala Gln Tyr Gly Asp Thr Gly Arg Trp Ile Phe Ala
88          180          185          190
89      Ala Gly Ala Phe Ala Ala Ser Leu Ile Trp Phe Pro Leu Val Gly Phe
90          195          200          205
91      Gly Thr Met His Thr Met His Ala Ala Ala Leu Ser Arg Pro Leu Ser
92          210          215          220
93      Ser Pro Lys Val Trp Arg Trp Ile Asn Val Val Val Ala Val Val Met
94      225          230          235          240

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999  
TIME: 14:26:31

Input Set: I105117E.RAW

95 Thr Ala Leu Ala Ile Lys Leu Met Leu Met Gly Thr Met His  
96 245 250

97 <210> SEQ ID NO 3  
98 <211> LENGTH: 2990  
99 <212> TYPE: DNA  
100 <213> ORGANISM: Corynebacterium glutamicum  
101 <400> SEQUENCE: 3

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103 ysgggacttg gaaaagtctt cattgattcc ggcgttaggg agctaacgac gtagttgctg 120  
104 ccgrgaadvv acagacactc agatcgatct ctagatctaa ggtccgcggt agcaacgggt 180  
105 atgtagccac adtrasrsw rwymtcagtt acccatagag tagctcctcc tagtgaagag 240  
106 gacgaaaatc gtaccctcgt cgaacddvga kmaaccaaag cccttcttca ggggttggtt 300  
107 ccggagccgc ttaacggagt ggttttggaa ggcgtgwgrr raggagctgc cctgttacct 360  
108 atgcgcggac gcgggggtgtc ctggttagctg cgcgggcagg tccagsvsrr rrgvgdvrgd 420  
109 dtgccagaac ttcgtgtaga aaccctggct tcgcattctg cccgtagcgt cgggttagat 480  
110 crdvdkgvrm aawdaaaggg tagttggtac atccgtaggg cgttactccc ccaacgttac 540  
111 cggttcacccg cgtakgdvmy adrstaahrm ccaaggttca agatgatgaa gtgtagggag 600  
W--> 112 *see* gtgcccta *item 10* cgaagtgc *on Enu* aatggcgagg tgvvcgavna rtvagatttt gtagagggtg 660  
113 ggcgtcgttc ctattacaca cgcgaagtag aaggttcgcg tcgcavdgrr sthadrctct 720  
114 gcaacgaggt ggggttcttc gatggagcaa cttgtgccct cctttggtac acctatctag 780  
W--> 115 *summary sheet* gwsavvwt *sheet* gcttagacgc aactaccgct accaattgcc cttaaagtcgt tccgcaggtc 840  
W--> 116 tatcaacgcg sdaatargs aaaatcaaag acgaacgtcg ttgtggtaaa aggcgcgacg 900  
117 aacgtgttcc tgaagtgggc gktavmkraa vvgaaagcca acgaaaccgg ccaaccacg 960  
118 cgctatggtt gtgagctggg tgcactacga gctctakatr svrvghhtc gaaattgcgc 1020  
119 gactgagtgg cggtcccccc tttacctttc ccgattcctc cgcggaagak vrsvasssas 1080  
120 agtabrcgsy sgcttcgacg gaagtagtta ctaactctcg tttcacaggt caacttacc 1140  
121 caagtatgcc ttcataaatg attgagagca aagtgtccag ttgaatgggg ttcatagaag 1200  
W--> 122 tsdstdnmr bsatattaaa ccattgtaag aaccaatcat tttacttaag tacttccata 1260  
123 ggtcacgatg gtmvysgatc atggaaatct tcattacagg tctgcttttg ggggccagtc 1320  
124 tttactgtc catcggmtgg assgaccgca gaatgtactg gtgattaaac aaggaattaa 1380  
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126 tttgtttcat cgccggcacc ttgggcggtg atctvcsdva gtgvdtttgt ccaatgccgc 1500  
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130 gcggttcggc ggtttvddtg gsavggccac tgacacgcgc aaccgggtgc ggggtggagg 1740  
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133 ttgtgtttat cggcggcgtc ggcgcgcaat acggcgacac cggacggtgg attttavggv 1920  
134 gaygdtgrwc gccgctggcg cgttcgcggc aagcctgac tggttccccg tgggtgggtt 1980  
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W--> 136 gctggatcaa cgtcgtcgtg gcasrskvw rwnvvvatab rtgsttrnr kctactggcg 2100  
137 taaccgtag tttgactaca actacccaat caaaagcgcc caaaaagttg tgatgaccgc 2160  
138 attggccatc aaactgatgt tgatgggtta gttttcgcg gvmmtaakmm gysccttagc 2220  
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143 gacgcgttca ctgacgggcg caaggaccgc ctarvwaama sgracagtaa ctccaacgcc 2520  
W--> 144 tggtatagtt ataacaagtg caagttgtac gggagtctgt ccctdnkrvm dnnvnmgsag 2580

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999

TIME: 14:26:31

Input Set: I105117E.RAW

W--> 145      aatgggaccg accgcgcctt tgggagacct taaggtagct ctataaacag gcactcgtck 2640  
W--> 146      gsarsggdyk dtcgggacgc gttcaccact ctttcgttac tgcggttctg gtaacaaccg 2700  
W--> 147      tcgactgacg ttgasavggg naasgttcaa gaggggcagg agcggggcaa ggagggtgggt 2760  
W--> 148      tgctaattac taccttatcg aaccngddgv wrnsysgact acttagtctt cgcccgtegg 2820  
149      gaggaggcgg tacttgagtc ggcgaggcgg acactchcga maaatgagac ctggcatacct 2880  
150      tctttatggg tgcatttctc ggaaaggtct gcgttggtac agtgcgyssg vyakgsavdr 2940  
151      rgttacgcat gtaccaaaga aggtttcctc atagaaymtt dtabrtgstt 2990

*See  
item 10  
on  
Even  
summary  
sheet*

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999

TIME: 14:26:31

Input Set: I105117E.RAW

Line	Error/Warning	Original Text
26	W "N" or "Xaa" used: Feature required	Ser Arg His Glu Leu Ile Xaa Thr Arg Asn H
112	W "N" or "Xaa" used: Feature required	gtgccctaata cgaagtgtccc aatggcgagg tgvvcgav
115	W "N" or "Xaa" used: Feature required	gwsavnvwts gcttagacgc aactaccgct accaattg
116	W "N" or "Xaa" used: Feature required	tatcaacgcg sdanatargs aaaatcaaag acgaacgt
122	W "N" or "Xaa" used: Feature required	tsgdstdnmr bsatattaaa ccatgttaag aaccaatc
125	W "N" or "Xaa" used: Feature required	gcgcgaagga ctcatgtcgg ttctnvkkgk rgavtctc
127	W "N" or "Xaa" used: Feature required	gccgatcgtg ctcgatatta tgcgctgggg tggcatcg
129	W "N" or "Xaa" used: Feature required	vmaakdamtn kvagatcatt gaagaaacag aaccaacc
131	W "N" or "Xaa" used: Feature required	gagcgtcgat aagcagcggg tttgatdtrn rrvvsvd
132	W "N" or "Xaa" used: Feature required	ggcaatcgtg ctgacctggg tgaacccgaa tgcgtatt
136	W "N" or "Xaa" used: Feature required	gctggatcaa cgtcgtcgtg gcasrsskvw rwnvvvat
140	W "N" or "Xaa" used: Feature required	ngadhsdaga gggtgagccg cagtcttttg aggttcaa
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147	W "N" or "Xaa" used: Feature required	tcgactgacg ttgasavgn naasgttcaa gagtggca
148	W "N" or "Xaa" used: Feature required	tgctaattac taccttatcg aaccngddgv wrnsysga